GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:4934
ANSWERED ON:19.04.2001
OUTLAY ON AGRICULTURE R & D
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether the outlay on Agriculture R&D in the country has been rising;

(b) if so, the details thereof;

(c) whether the Government are aware that output quality of R&D has been declined in the ICAR system as judged from any improvements which affect productivity or quality of life of farmers;

(d) if so, whether the ICAR has not come up with any timely action on watershed management and resources, land degradation, wastelands and other ailments including improved productivity or decreased use of expensive inputs of water energy and other inputs;

(e) whether USA and Europe together are not producing 12 US $ billions worth of organic food while Cuba has turned totally organic as against poor production in India where bureaucrat and technocrats have joined together to promote vested interests by working against organic methods on false and frivolous arguments;

(f) if so, the details thereof;
(g) whether there is a total failure of accountability as seen from the failure of the five year review mechanism of ICAR institutes; and
(h) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. DEBENDRA PRADHAN)

(a) Yes, Sir.

(b) The details of allocated plan funds in respect of DARE/ICAR is as under :

Year	Allocation (Rs. in crore)
1997-98	331.17
1998-99	531.17
1999-2000	504.00
2000-2001	550.00
2001-2002	684.00

(c) India has witnessed spectacular advances in the production and productivity of different crops including food grains, oilseeds and commercial crops. In food grains, production has increased from 50.82 million tonnes in 1950-51 to an all time high of 208.88 million tonnes in 1999-2000. It is significant that area under food crops has reminded about 125 million ha for the last 25 years. The increase in crop production thus has been achieved largely through increase in productivity. The productivity from 1950-51 to 1999-2000 increased from 522 kg/ha to 1637 kg/ha in food grains; 481 kg/ha to 855 kg/ha in oilseeds and 33422 kg/ha to 71989 kg/ha in sugarcane. The food grain production in the country over the period 1949-50 has maintained an impressive compound growth rate of 2.69% as compared to population growth rate of 2.1 percent. This has enabled the chronically food deficit country to become self sufficient besides having about 33 million tonnes in the buffer stock and 4 to 5 million tonnes of cereals in excess of its domestic demand for export.

Significant achievements have been made in developing high yielding and superior varieties, standardisation of agro-techniques, control of pests and diseases and post harvest management of various horticultural crops. As a result, productivity of fruits and vegetables has become double alongwith substantial increase in area and production during the last few decades. Fruit crops such as aonla, ber, bel and tamarind have also been identified for growing in wasteland and their suitable varieties and production technology have been developed. This has helped in improving quality of life of farmers.

As far as the production potential of important cereals is concerned the average production potential of wheat from demonstration plot was 41.00 q/ha against the national average of 26.22 q/ha, 44.24 q/ha and 22.40 q/ha of irrigated and rainfed paddy respectively against the national average of 19.85 q/ha and 22.07 q/ha of maize against the national average of 16.55 q/ha.

The production potentials of important oilseeds, pulses and major cereals conducted on the farmers plot demonstrated the possibilities of increasing the productivity by manifold. Against the average national productivity of 8.55 q/ha of oilseed, the productivity of demonstration plots varied from 10.29 q/ha in linseed to 24.38 q/ha in castor. Similarly, against the average productivity of 6.08 q/ha of pulse in the country, the production potential of demonstration plot varied from 8.40 q/ha in blackgram to 14.67 q/ha in field pea.

The Indian Council of Agricultural Research (ICAR) has established 261 Krishi Vigyan Kendras (KVKs) in the country. The achievements of the KVKs during the last two years indicated that there has been increased number of activities related to training programmes, frontline demonstration and production of seeds and planting material by the KVKs. The number of training programmes has been increased by 2765 with the addtional participation of 0.437 lakh farmers, rural youths and extension functionaries during 2000 over the previous year. Similarly, the area covered under frontline demonstration has been increased by 1117 ha with additional 4636 demonstration over the previous year. There has been a quantum jump in the production of quality seeds and planting material of various crops. Druing 2000, additional 2370.57 tonnes of seeds and 13.22 lakh of planting material were produced by the KVK and provided to the farmers of their respective areas.

(d) The entire thrust on watershed development and research in the country has been mainly due to timely, effective and sincere efforts continuously made by Indian Council of Agricultural Research (ICAR) Hqrs. and its different institutes since 1923 when Dry Farming Research was started at Pune leading to establishment of 8 Soil Conservation Research Development and Training Centres (1954-61). This lead to the development of Drought Prone Area Programme (1971) and River Valley Projects (1971) of the Ministry of Rural Development/Agriculture.

The technology developed by ICAR was effectively demonstrated in 47 Model Watersheds Operational Research Projects (1984-87) which was greatly appreciated and lead to the development and implementation of National Watershed Development Programme for Rainfed Areas (NWDPRA) of Ministry of Agriculture. The concept of participatory watershed development approach was successfully demonstrated through landmark projects like Sukhomajri, Relmajra, Tajpura and Chittradurga. Ths concept was later on widely adopted by NGOs and state agencies and formed the basis of Common Approach (guidelines of NWDPRA Jan Sahbhagita) adopted by Ministries of Agriculture and Rural Development.

ICAR Institutes have also greatly helped in capacity building for watershed development programmes through training of watershed workers, farmers, exhibitions/demonstrations, media reports and publication of a large number of brochures, manuals and popular literature.

(e) & (f): U.S.A., Eurpoe and other Latin American countries like Cuba have food surplus with stabilized population growth whereas country like India with increasing population pressure have to produce 300 million tonnes of food in next 2-3 decades from the existing level of 209 million tonnes. This can only be done by providing adequate inputs like fertilizers (inorganic and organic), plant protection measures including bio-pesticides and Integrated Plant Nutrient System as propagated by ICAR through its Institutes, All India Coordinated Research Projects and National Agricultural Technology Project (NATP). In view of the inadequacies of organic fertilizers (like phospho compost, vermi compost, Farm Yard Manure) we may have to lay greater emphasis on Integrated Plant Nutrient and Protection System wherein a judicious mix of organic (including green manures) may be used along with inorganic fertilizers.

(g) & (h) : No, Sir. There is no such failure. On the contrary, a long term perspective visionary approach document has been developed by the ICAR to secure sustainable food production and also to meet the future demand for food. The document presents the outlook towards 2020 and provides framework for a revised mandate, new priorities, new programmes and participatory modes of action, and organisational adjustments for effectively addressing the challenges and opportunities before us and for ushering in an ever green revolution. The following paradigm shift has been chalked out to reform and revamp the National Agricultural Research System.

i. Consolidation and right sizing of research infrastructure
ii. Research prioritisation through bottom-up and participatory mode
iii. Introduction of project based budgeting
iv. Merit linked, performance oriented incentives and rewards
v. Human resource capacity building through national international exchanges and networking
vi. Building partnership with private sector and voluntary sector
vii. Augmenting research-extension-farmer linkages
viii. Decentralised administration

The five yearly review mechanism has been taken up in all the Institutes/National Research centres, Project Directorates and All India Coordinated Research Projects through Quinquennial Review Team (QRT) comprising eminent experts, as and when due. The recommendations of the QRT are examined by the Council as well as the Governing Body of the Council and regular follow-up action is being taken.